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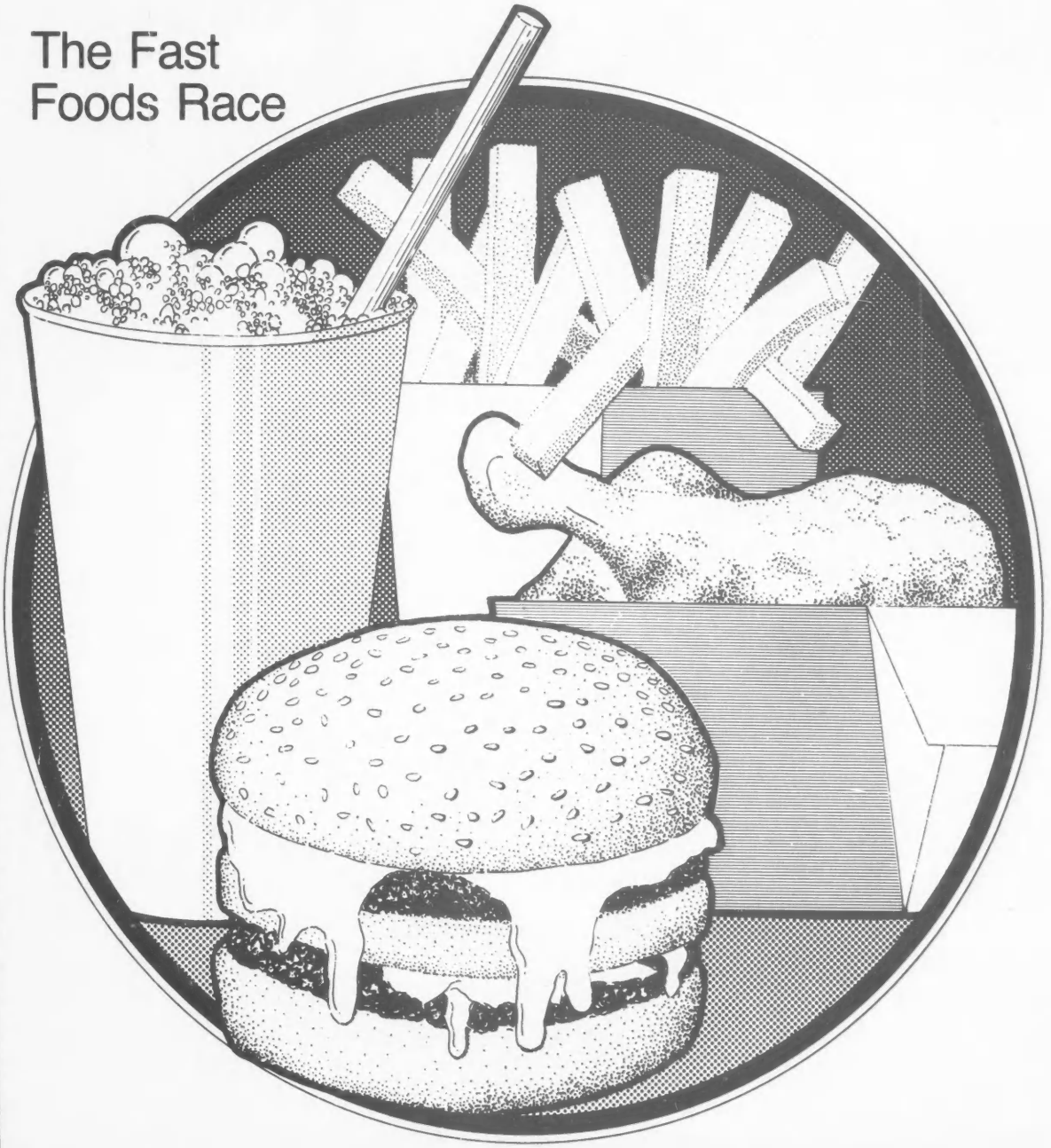
Service

October 1979

FARM INDEX

The Fast Foods Race



Perspectives

Farm exports in fiscal 1980 are expected to rise to a record value, repeating a string of increases lasting 10 straight years.

Though the year is hardly underway, trade experts are fairly confident of big gains—to a range of $35 to $40 billion, up from the fiscal 1979 total, itself anticipated at a record $32 billion.

World demand heavy. Fueling the strong increase foreseen:

- expected big increases in Soviet grain purchases because of the reduced 1979 grain production.
- a growth of 1 to 2 percent in livestock production in our major markets.
- further economic gains in the fast-growing developing countries, despite the oil price increases.
- relatively little growth in farm production in the poorer developing countries.
- transportation and storage problems in major competitor countries that are likely to limit their exports.
- smaller supplies of coarse grains available for export by major competitors.

Don't count the chickens yet. Achieving the predicted level is going to take a lot of coordination—and some luck.

For example, adequate transportation capacity here and abroad will be crucial if we are to ship out the 150 million metric tons of major bulk agricultural commodities now projected.

To say the least, this volume of exports will put our internal transportation system and port facilities to a severe test. The volume shipped last year, in comparison, was 130 million tons.

We also need some luck with weather. A really bad winter that might close ports for a long time would reduce our potential shipments.

Supply prospects good right now. Weather at home and abroad over the next 12 months will also play a key role in just how strong world demand continues, and how large our available supplies will be.

At this point, U.S. crops are in excellent condition, and exportable supplies appear plentiful. The U.S.-USSR grain agreement was expanded early to allow 8 million tons of wheat to be shipped in fiscal 1980. Increased corn availability will be discussed with the Soviets in October, under the normal procedure of the agreement.

Record farm trade surplus seen. On the import side, the value of our agricultural purchases may total $16 to $19 billion in fiscal 1980. During the fiscal year just ended, we imported an estimated $16.3 billion.

Meat import values are likely to rise, and gains are also expected for coffee, fruits and vegetables, sugar, and rubber.

With imports in the projected range, the agricultural trade surplus in fiscal 1980 could increase about a fourth to $20 billion, a record margin itself.

That means U.S. farmers will once again make a major contribution to our balance of payments position.

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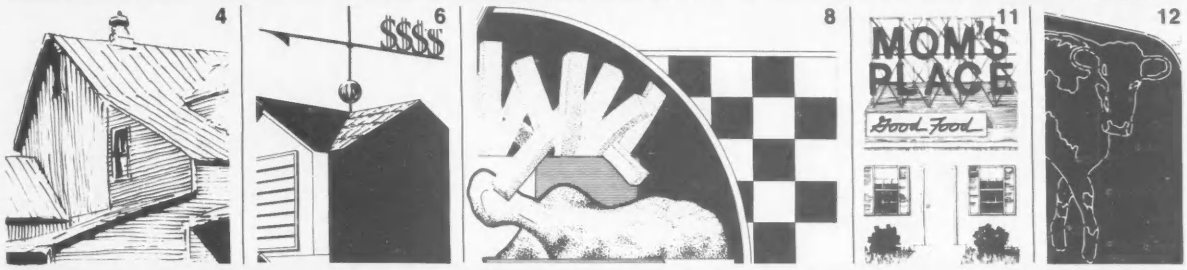

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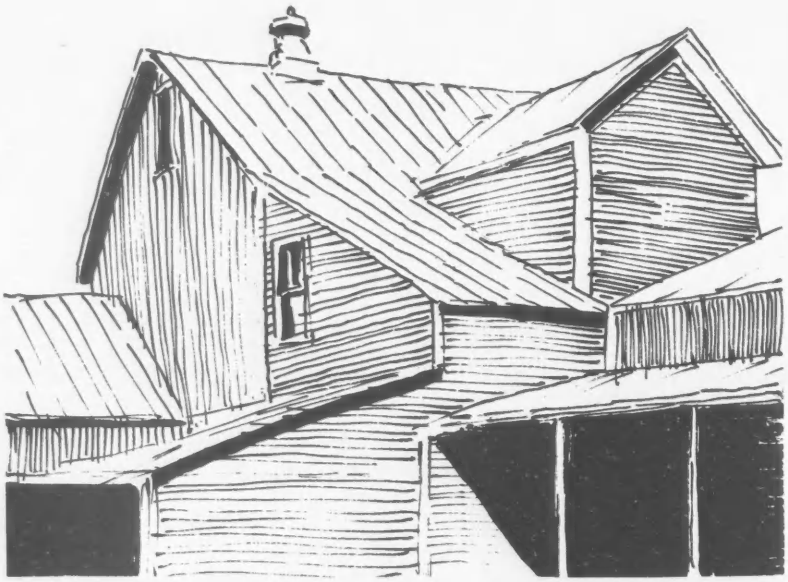
The Farm "Shuffle"



A recent definitional change of an American cornerstone—the farm—has led to the reclassification of nearly 302,000 farms and 1.5 million farm residents.

A new farm definition agreed upon by Government and Congressional officials in the mid-1970's put the 1978 farm count at 2.4 million, with 6.5 million people. The previous definition would have meant an estimated 2.7 million farms and 8 million residents.

Over the years, agriculture has seen major changes and it has been important from time to time to redefine a farm. Since 1950, the definition has been changed twice, to keep pace with the changing structure of agriculture.

The new definition

A farm is now "any establishment from which $1,000 or more of agricultural products is sold or would normally be sold during a year."

Under the previous classification a farm was "any place under 10 acres with annual sales of $250 or more of agricultural goods, or any place of 10 or more acres selling $50 or more".

The new definition was adopted mainly to remove from the farm count those places and people having insignificant farming activity or dependence. Many of these marginal places can no longer be located under the census of agricultural enumeration procedures.

Also, inflation of the dollar would have caused a change in existing cutoff values. It takes very little effort to sell $50 or even $250 worth of agricultural goods.

Little change

Under the old definition there was a slight decline in farms of 34,000 from 1977 to 1978. During the same period, farm population changed from 7.8 million to 8.0 million. Because of normal sampling variation this change cannot reliably be viewed as an increase. However, it does seem to indicate stability in farm population during the period.

This is in contrast to the almost steady decline of U.S. farm population for more than a half century. In 1920, 30 percent of the Nation's population resided on farms. The proportion had fallen to 15 percent by 1950, 5 percent by 1970, and presently stands at 3 percent.

Decline may be ending

The fact that there was no meaningful change in the last year may signal that the long-term decline in farm population has ended. However, it will take data from several more years to confirm or reject such a finding.

An examination of the group shifted from farm to nonfarm by the definitional change shows a racial-ethnic composition closely resembling the overall farm population. Both the farm and reclassified farm group were primarily White, with roughly five percent Black and 1 percent Hispanic.

Age make-up

The reclassified group had an older age structure than the remaining farm population. The median age was 38.1 years, compared with 33.8.

Farm males outnumbered females by 291,000 in 1978. There were 109 males on farms for every 100 females; whereas under the old definition, the sex ratio would have been 107 to 100. Again, this did not represent a change of any consequence.

In 1978, men in the reclassified group were somewhat less likely to be working than were men on qualifying farms. However, there was no difference in labor force participation among women.

The lower level of labor force participation for men is consistent with the higher average age of reclassified people and their greater likelihood of being retired.

Outside jobs

Nevertheless, of the 1.5 million persons who were reclassified, 700,000 were in the workforce. Of these, about one-fifth were primarily engaged in farming, although they had produced little for sale on their places.

In other words, most of the members of the reclassified group were supported chiefly by off-farm work. This is substantiated by the income characteristics of this group.

The 1.5 million farm residents reclassified represented 398,000 families who lived on units with agricultural sales of under $1,000. Yet, nearly half had incomes of $15,000 or more in 1977, and nearly two-thirds had incomes of $10,000 or more, reflecting a high dependence on income from nonfarm sources.

[Based on the manuscript; "U.S. Farm Population: 1978," by Vera J. Banks, of the Economic Development Division; and Diana De Are of the Bureau of the Census.]

The Hired Farm Workforce

While the farm population has shown an almost steady decline in recent years, the hired farmworker picture has changed little—at least on the surface.

The hired farm workforce has hovered around 2.7 million persons since the late 1960's. However, amidst this apparent stability, the makeup of this workforce has changed markedly.

Over the past few years, the hired workforce has been predominately White (71 percent), with minorities accounting for 29 percent. Of the minorities, 61 percent were Blacks and Others and 39 percent were Hispanic.

Since the late 1960's, the number of Black and Other hired farmworkers has declined about 46 percent. This change has reduced the Black and Other percentage of the workforce from 27 percent in the late 1960's to 16 percent in recent years.

During the year 1977, Blacks and Others comprised 44 percent of the farm workforce in the Southeast, but only 16 percent in the mid-Atlantic and lower Pacific Coast regions, and 17 percent in the Southwest.

Nearly half of the workforce in the lower Pacific Coast region and one-fourth of the workforce in the Southwest were Hispanic, in 1977. Workers in the remaining regions of the U.S. were almost entirely White.

Since the late 1960's, the average age of farmworkers also declined. This change was primarily due to declining numbers of workers 45 years and older and an increase in the age group 18–24 years old.

In 1977, on the average, minority workers were older than their White counterparts. The median age for Blacks and Others was 33 years, Hispanics 30 years, compared to only 23 years for Whites.

These figures show that White workers were more likely to move out of hired farmwork as they became older. These findings also suggest that hired farmwork serves more as an entry job into the labor force or a supplemental job for Whites than for minority workers.

Minorities also were employed on the farm for longer periods during the year and received higher annual farm earnings than White farmworkers.

The figures show Hispanic farmworkers averaged 118 days of work, compared with 110 days for Blacks and Others, and 86 days for Whites.

Annual farm earnings for Hispanics and Blacks and Others averaged $2,830 and $2,356, respectively. Earnings for both groups were significantly higher than the $1,672 average for Whites.

[Based on the manuscript, "The Hired Working Force of 1977", by Gene Rowe, Economic Development Division.]

U.S. Agriculture: Debts vs. Assets

The farm finance picture took a definite turn for the better last year.

A glance at the ledger shows farm debts and assets increasing at comparable rates in 1978. Just a year earlier, in 1977, debts had outpaced assets by twice the rate of gain.

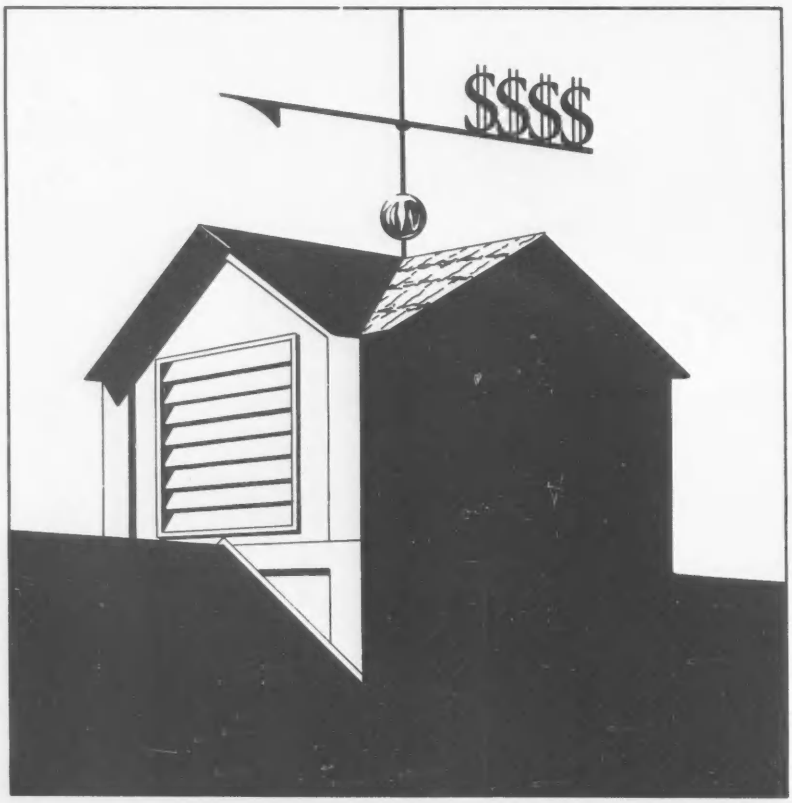
Farm income improved sharply in 1978. Net income after inventory adjustment rose $8.1 billion over 1977, compared with a mere $1.1 billion increase in 1977 over the year before.

Still another financial pointer—the rate of return on equity in farm production assets—showed healthy signs, reversing a downward trend begun in 1974. The rate of return in 1978 was 3.6 percent, compared to the record 2.3-percent low of the year before.

Assets: record gain

Farm assets—including both physical assets such as real estate, livestock, machinery, and crops, and financial assets—were valued at $820 billion in 1978.

Assets rose by a record $107 billion in 1978, increasing more in a single year than during the entire 1960's.



Debts slow pace

At the same time, 1978 debts passed the $137-billion mark, inflated by a record rise of $18 billion over 1977. The 1978 rate of increase, however, at 15 percent, was down from the year before.

Farmer's equity (assets minus debts) reached $683 billion in 1978. Equity rose by a record $89 billion, double the gain of the year before.

The farm debt-to-asset ratio for 1978 held close to its year-earlier proportions at 16.8 percent. That is, for each dollar of farm debt, there were roughly $6 in farm holdings.

Land value continues steady rise

The average farm owner in 1978 had more than a quarter million dollars invested in farm production assets. Four-fifths of that investment lay in farm real estate.

Land, then, remained the farmer's most precious asset, at a national average value of $559 per acre.

Land value increased by 14 percent in 1978, twice the 1977 increase. However, the rise in land values accounted for a less-than-usual 70-percent share of the overall increase in 1978 farm assets.

Livestock increase significant

The remaining gain in 1978 farm assets reflects a 60-percent jump in livestock value from 1977. Cattle and calves accounted for nearly all of the increase, with a higher value per head more than offsetting declining herds.

Crop values rose by 10 percent—a result of higher prices and larger inventories at the end of 1978 than at the beginning.

Farm machinery and motor vehicle values rose 9 percent.

Investments high

Farmers' financial assets increased by $2.3 billion in 1978 compared with $1.6 billion a year ago. The financial asset estimate incorporates bank deposits, currency, U.S. savings bonds, and investments in farm cooperatives. The 6-percent rise in financial assets largely reflects a gain in co-op investment.

"Real" loans increase

Under the liabilities column, farm real estate debt rose $8.6 billion. The 13.5-percent hike was almost identical to the year's percentage rise in real estate value.

Three-quarters of real estate loans were held by Federal land banks, individuals, and others. Life insurance companies were responsible for much of the remainder.

Commercial bank and Farmers Home Administration (FmHA) loans also increased, but at slower rates than for the previous year.

Commercial banks

Loans on farm supplies, machinery, equipment, and other nonreal estate items increased about as much as real estate loans.

Much of the $8.8-billion increase came from disaster and economic emergency loans issued by FmHA and the Small Business Administration.

Commercial banks remained the largest overall lender of operating funds, responsible for nearly one-half of all loans outstanding.

FmHA, however, had the largest increase of loans in the past year, with an 84-percent rise over 1977.

CCC loans slipping

Producers were still taking advantage of price support loans in 1978—CCC lending hit a $5.2-billion high. Yet, the 17-percent increase was a sharp decline in the growth rate from the previous year.

The CCC debt outstanding includes loans on crops stored in the farmer-owned grain reserve.

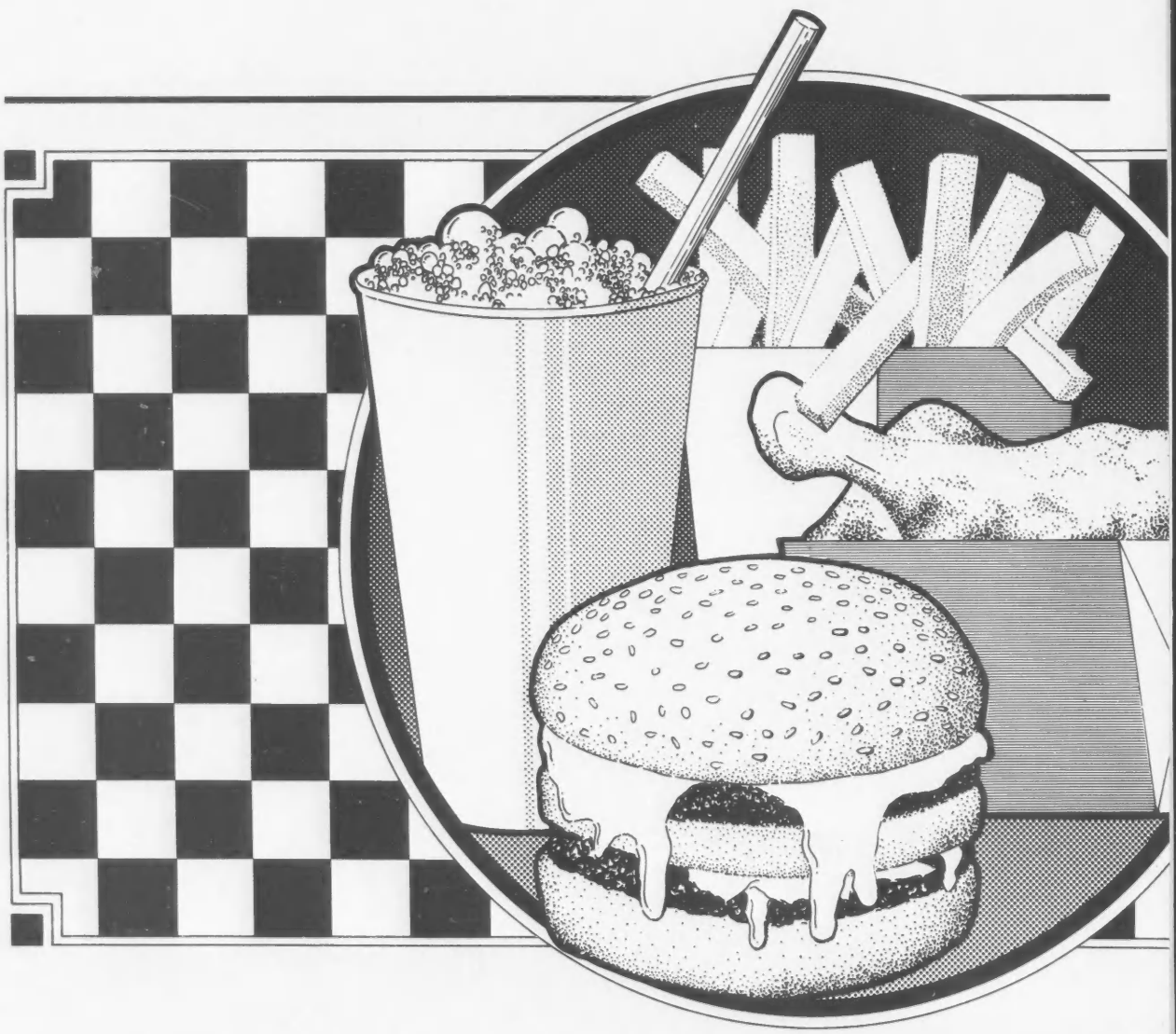
[Based on the report, "Balance Sheet of the Farming Sector, 1979," by Carson D. Evans, of the National Economics Division.]

Balance Sheet For The Average Farm 1/

Item	1960	1970	1977	1978 2/
		Dollars		
ASSETS				
Physical assets:				
Real Estate	34,610	73,172	196,789	227,442
Nonreal estate:				
Livestock & poultry	3,848	7,962	11,958	19,445
Machinery and motor vehicles	5,739	10,952	29,064	31,991
Crops stored on and off farms 3/	1,952	3,703	9,310	10,402
Household equipment & furnishings	2,326	3,249	6,157	7,274
Financial assets:				
Deposits and currency	2,313	4,032	6,111	6,350
U.S. savings bonds	1,177	1,268	1,652	1,815
Investments in cooperatives	1,071	2,442	5,787	6,423
Total	53,036	106,780	266,828	311,142
CLAIMS				
Liabilities:				
Real estate debt	3,049	9,896	23,818	27,448
Nonreal estate debt:				
Excluding CCC loans	2,909	7,178	19,140	22,735
CCC loans 4/	294	907	1,680	1,989
Total liabilities	6,252	17,981	44,638	52,172
Proprietors' equities	46,784	88,799	222,190	258,970
Total	53,036	106,780	266,828	311,142
		Percent		
Debt-to-asset ratio	11.8	16.8	16.7	16.8

1/ Total values divided by total number of farms. 2/ Preliminary. 3/ All crops held on farms including crops under loan to CCC, and crops held off farms as security for CCC loans. 4/ Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

The Fast Foods Race

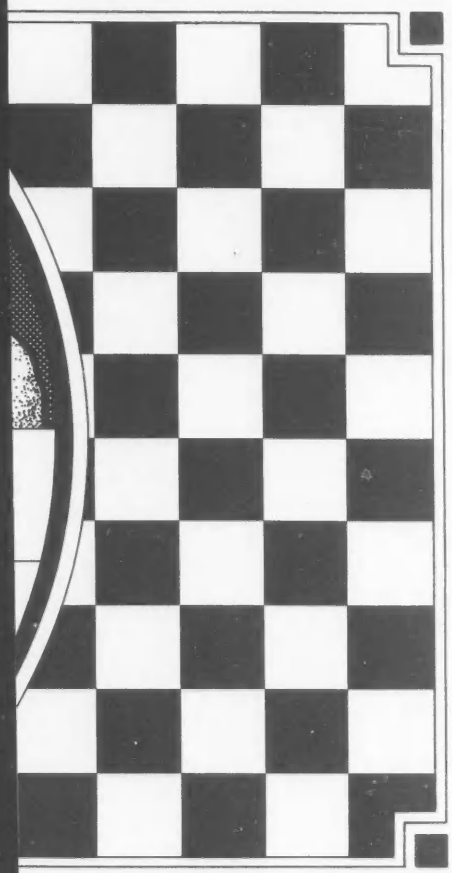


"Fast" applies to more than just the service in a fast food restaurant. Menus, styles, and operating methods all change rapidly.

Fast food outlets used to mean just 'burgers, 'shakes, and fries, but now they run the gastronomic gamut from fish 'n chips to tacos, pizzas, chicken—whatever the public tastebuds want.

The standard carryout service has given way to an interior ambiance designed to get customers indoors for a bigger meal.

There's no doubt that these marketing ploys have worked. Since 1963, growth in the fast food industry has



exceeded that of any other segment of food retailing.

Rapid growth

Between 1963 and 1978, sales of fast food outlets—discounting inflation—increased 305 percent, from $4.9 billion to $19.7 billion. By contrast, food stores increased their sales by 44 percent, and sales of all eating places—including fast foods—increased 83 percent.

Likewise, the share of total eating place sales claimed by fast food outlets more than doubled from 1963 to 1972, when it stood at 33 percent. This increase was at the expense of restaurants and lunchrooms.

Although more recent data are not yet available, the market share of fast foods vis-a-vis other eating places has undoubtedly increased since 1972.

Possible moderation

While this expansion has been extraordinary, surpassing both population and income growth, indications now point to a possible moderation in industry expansion.

Higher consumer prices—resulting from increased food, labor, and energy costs over the past few years—may be causing people to think twice about eating away from home. This hesitation has been compounded by the gas shortage.

In addition, the inflated prices of other goods and services, competing with fast foods for the consumer's dollar, could also be stemming the industry's rapid growth.

In the past 2 years, fast food firms strove hard to attract and keep customers with price specials and promotional attractions. Advertising budgets soared, particularly those of the largest firms.

Top firms

Of course, these efforts also reflect heightened rivalry among the top fast food firms, which now dominate the industry.

Over the years, the field of competition in fast foods has narrowed considerably, leaving a handful of large franchising chains with nearly half the market.

Currently, the four largest firms—McDonald's, followed by Kentucky Fried Chicken, Burger King, and Dairy Queen—account for 41 percent of total fast food sales. The 20 largest firms account for 71 percent.

By contrast, the four largest firms in 1964 had only 20 percent of the market; the 20 largest had 42 percent.

Further industry concentration could limit competition and increase market power at the expense of consumer prices.

Growth incentives

The evolution of the fast food industry into a relatively small number of large firms was spurred on by the potential savings from volume purchasing, coordinated distribution patterns, and the ability to absorb overhead costs of such specialized management tools as computers.

Large firms enjoy many other advantages over their smaller competitors.

They are better able to obtain long- and short-term credit at more favorable rates, engage in scientific site selection, and conduct marketing, merchandising, and consumer research.

These advantages, when translated into dollar sales, become obvious. Between 1967 and 1972, the sales of chain establishments—firms having 11 or more outlets—increased 109 percent, while sales of single-unit eating

places (not necessarily fast foods) increased only 5 percent.

During the same 5-year period, chains increased their market share by 10 percentage points. The share of single outlets dropped accordingly.

The competitive advantage of these largest firms has pushed—and continues to push—the smaller fast food chains and single-unit operations out of business.

Influence on food industry

As the fast food industry has grown over the past decade, its effect on the entire food industry has become substantial.

Fast foods are now a major segment of the food delivery system. As such, they affect production at the farm level as well as the processing, wholesaling, and retailing of farm foods. For example:

- Many food processors have established internal divisions having sole responsibility for developing products for fast food chains.
- Some chains are so large that they have assumed the wholesale function and distribute food directly to their own outlets.
- Some large firms contract directly with farmers to ensure a continuous supply of the quantity and quality of desired goods.
- And grocery stores are now recognizing the threat that fast food outlets present to their traditional role as food suppliers. In response, many now emphasize convenience foods and services and provide prepared meals and snacks within their stores.

[Based on the article "Fast Food Industry: Growth in Establishment and Firm Size," by Michael Van Dress of the National Economics Division]

The Franchise System

While change has been an important ingredient in the rise of fast food markets, consistency has been a major reason for their success.

Have you ever wondered why your favorite fast food hamburger tastes and looks the same whether you buy it in Buffalo or Albuquerque?

Partly because most fast food outlets are members of a franchising firm. It sells to qualified applicants the right to open a fast food establishment under the company name. In return, the new owner must agree to strictly maintain the firm's product and service standards.

The fast food outlet becomes a link in a chain with identical trademarks, menus, products, storefronts, and logos.

To open a fast food outlet the potential owner must purchase a license from the franchising firm, buy or lease the site of the establishment, the necessary equipment, and have access to a set amount of equity capital.

Actual costs vary greatly depending on the size and requirements of the franchising firm. The owner may also have to pay his franchising firm a percentage of the sales.

In most cases new owners are required to attend a training session where they are rigorously schooled on the methods of company operation.

Probably the most famous of these is "Hamburger University" run by the McDonalds Corporation in Elk Grove, Ill. Here new owner-operators attend a 3-week course that leads to a "Bachelor of Hamburgerology, with a minor in French fries."

Students are taught such critical procedures as how to tell when a burger is done, how to flip a burger, and how to scrape the grill.

After new owners complete the school, franchising firms still keep them on a tight rein. Most firms allow little experimentation with decor or menus.

All food served must meet the specifications called for in the franchise agreement—down to the slightest detail.

For example, a regular fast food hamburger may call for a 1.6-ounce patty .221 inches thick, garnished with a quarter-ounce of onion, premeasured amounts of ketchup and mustard, a pickle slice, all resting on a bun 1.25 inches high and 3.75 inches in diameter.

To see that the specifications are met, most franchise firms maintain a staff of field consultants who pay each outlet both announced and surprise visits.

An operator found to have violated the franchise agreement may have his license revoked.

[Based on material provided by Michael Van Dress of the National Economics Division and other special material.]

Fast Foods At Home

More and more Americans are eating out these days. In fact, over $87 billion—nearly 35 percent of the U.S. food dollar—is spent annually in restaurants, fast food outlets, and other away-from-home eating places.

Fast food outlets have grown rapidly in the past 15 years and have more than doubled their share of sales of all eating places—from 15 to 32 percent. They have gross yearly sales of over $19 billion.

Such rapid growth by any segment of the food market leads to questions and speculation. How nutritious is such food? Is one fast food place the same as another? And most importantly, does it cost more to eat at a fast food outlet than at home?

Favorable comparisons

Recent studies have shown that, for certain nutrients, fast food meals compare favorably with similar meals prepared at home.

Other studies have indicated that standard fast food items, such as hamburgers, "specialty" hamburgers (usually larger sized sandwiches with additional toppings), cheeseburgers, and french fries sold by leading franchise chains are similar in content and price to those prepared at home.

But with food prices increasing so rapidly, new questions are raised about changing relative costs.

Determining costs

To answer the question of cost savings, USDA's Economics, Statistics, and Cooperatives Service (ESCS) compared the costs of selected fast food items with those of the same food prepared at home.

Hamburgers, cheeseburgers, frozen french fries, fish sandwiches, soft drinks, and specialty hamburgers were priced at selected franchise fast food outlets in the Washington, D.C. area.

These items were chosen because they can be easily prepared at home—they require no special skills or kitchen equipment. For that reason, fried chicken, pizza, cookies, pies, milkshakes, and french fries from fresh potatoes were not considered in this study.

Prices for comparable food items prepared at home were obtained from local supermarkets for lean ground beef, frozen french fries, packaged hamburger rolls, processed American cheese, frozen fish fillets, and soft drinks.

Comparing costs

The results: A meal consisting of a special hamburger, french fries, and a soft drink cost $1.61 at a leading fast food chain in 1979, 83 cents at home. The difference, 78 cents, represented the cost for labor, energy, overhead, and the atmosphere of the restaurant.

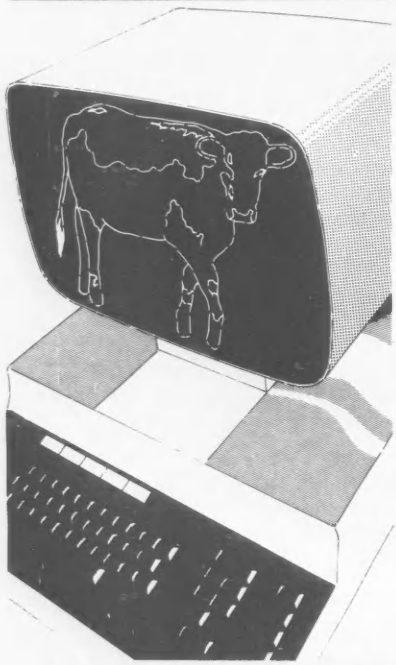
However, from the standpoint of the household budget, the cost difference primarily represented a return on the time and effort the homemaker spent preparing the meal at home.

In recent years, inflation has substantially increased the cost of food both at home and at fast food outlets. But with the exception of regular hamburgers and soft drinks, at-home food costs have increased at a faster rate.

For example, in 1976, a family of four could eat special hamburgers, french fries, and soft drinks for $4.60 at a fast food restaurant, compared with $6.80 today—a 48-percent increase. The same food prepared at home cost $2.20 in 1976 and $3.32 in 1979, a 51-percent increase.

[Based on an article by Masao Matsumoto, "The Cost of Fast Food Meals at Home," in the June issue of *National Food Review*, NFR-7.]

"Watts" New In Meat Trading?



The voices of wholesale meat brokers may soon be replaced by the clicking of computer terminal keys and green readouts on electronic display screens.

A recent study on the feasibility of electronic wholesale meat trading by the Economics, Statistics, and Cooperatives Service and the Agricultural Marketing Service indicates that wholesale meat transactions are particularly adaptable to computerized trading.

Can speed operations

Meat is described in terms easily understood by all trading participants. It is a high-value and high-volume product. In addition, the wholesale meat market is a national one; the product must move great distances between buyer and seller.

The time it has taken for packers to sell their product to wholesalers and large retailers could be sharply reduced.

There is a clear need for a massive overhaul of the present wholesale meat trading system, which is plagued with inefficient transactions and pricing methods, and inequitable marketing opportunities.

International market

The problem stems from the time it takes to complete one-to-one transactions, and from the fragmented information available on daily trade. The report shows that a computer-controlled system of trading could streamline and organize transactions.

Each trader would have access to a central computer through a leased cathode ray terminal. This TV-like display screen would bring a large number of buyers and sellers into instant contact, providing a true national, or even international, market. The terminals can transmit at the speed of light many different messages simultaneously, allowing traders immediate access to any part of the system when they need it.

Present systems limited

There are some noncomputerized electronic trading systems already in use. The teleauction (simultaneous contact on the phone of up to 15 buyers) has been in use since 1963. There is also the teletype, which is faster then the phone and provides a printed record of transactions. But both of these systems have time limitations that the computerized system overcomes.

One of the main benefits from computer controlled trading would be more accurate pricing information. The system would draw together the scattered reports of sale prices into a coherent pattern, allowing market news services to more precisely determine what happened in the market on a given day.

System is affordable

The cost for the computer terminal should not be prohibitive, even for smaller firms. The terminal rents for about $500 a month.

For firms that slaughter more than 100,000 head of beef a year, terminal costs per truckload would come to $4; for firms that slaughter more than 500,000 hogs a year, the costs would be less than $5 a truckload.

Smaller, cheaper terminals with less capacity are also available, and even push-button phones can be used to access the computer network.

Computers already used

Several systems already in operation suggest alternate ways the meat trade may use the computer:

- TELCOT, used by the Plains Cotton Cooperative Association, works by blind bid, with 15-minute bidding sessions for the item shown on the display tube.
- In the firm offer system, a selling price is displayed; the first buyer to press the "buy" key gets the product.
- Egg Clearinghouse, Inc. uses a system in which the computer matches bids and offers.

Instant information

An electronic system would ensure a more competitive market by enlarging the trading area—putting buyers and

sellers in contact with the greatest possible number of potential customers.

The smaller firms that have traditionally been "captive suppliers" of large volume repeat customers, who may not offer the best terms, would have access to new outlets.

Buyers and sellers could instantly select the kind of information needed: bids and offers arrayed by price, regions, and time frame.

Codes could be used to identify customers. Costs would be cut by the replacement of a whole group of salespeople at phones by one terminal operator.

Support activities

The time-consuming one-at-a-time sales contacts would be replaced by a simultaneous offer to all potential buyers. And individual firms would be provided with valuable support activities, such as schedules of product movement and a wrap up of all transactions during a day.

It is evident that the whole industry would benefit from the increased efficiency of transactions, coordinated flow of product, and more accurate pricing information. Traders would have more confidence in equitable trading practices and the best possible allocation of resources.

Electronic wholesale trading has already proved an invaluable tool in other agricultural industries. The wholesale meat industry would realize the same benefits.

[Based on the study, The Feasibility of Electronic Marketing for the Wholesale Meat Trade, AMS–583, May 1979, by Gerald Engelman, David L. Holder, and Allen B. Paul.]

A Glance At The Past

Reflecting the increasing complexity of American life, meat trading has evolved from direct farmer-to-retailer sales to a confusing system of broker transactions, middlemen, and formula pricing.

During the colonial period, price negotiation and delivery were conducted simultaneously, as all meat consumed in the cities was bought directly from nearby farms by the butchers, who slaughtered the product themselves. Wholesaling did not exist.

In the early 19th century, slaughtering began to be separated from retailing. Cattle producers were expanding westward, and cattle were shipped to the eastern cities. Now the retailers dealt with the wholesaler-slaughterer rather than the farmers; negotiations were still conducted face-to-face.

When the refrigerated car was invented in 1870, the slaughterers moved nearer to the farms, but the retail butchers still dealt face-to-face with the slaughterer's nearby distribution outlet.

The industry became further specialized after 1900 with the rise of nonslaughtering meat processors, who could package wholesale cuts bought from the slaughterer and distribute them to the retailers.

Thus there were now two steps in the wholesale process, and there arose the need for brokers, who served as intermediary agents between slaughterers and processors.

The wholesale process remained the same until about 1950, when two important events altered the picture—the rise of the supermarkets and food chains, which ended the era of the butcher as retailer, and the general acceptance of Federal grade standards for beef.

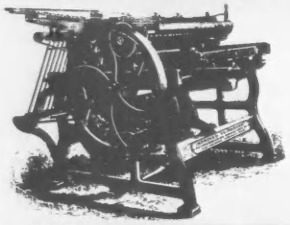
With grade standards, chain-store distribution centers could now order beef by description from wholesalers thousands of miles away. Face-to-face negotiations went the way of the retail butcher.

These new developments obviously helped to open up the wholesale meat market, but they created problems that still plague the industry.

Negotiations prior to shipment became the standard practice; this naturally led to a system of formula pricing, where the transaction price is based on a market quotation of a base price. Transportation costs and special circumstances are negotiated, but the final transaction price is not known until the base price is reported, usually the day before shipment.

But because price quotations are based on the relatively few negotiated price sales, accurate price reporting is difficult.

Recent Publications



Establishing a Trout-Marketing Cooperative. James L. Goff, Ralph W. Dutrow, and Raymond Williams, Cooperative Development Division FCRR–12.

To meet the volume requirements of new markets like restaurants and supermarkets, trout growers are considering forming a cooperative. The growers say they would commit up to 1,260,519 pounds of trout to a cooperative. That volume will require the cooperative to raise $329,500 for initial operating capital. The cooperative's annual net income is projected at $23,955 by the third year.

Food Prices in Perspective: A Summary Analysis. National Economic Division. ESCS–53.

This report presents a summary assessment of food price behavior, component costs, consumer demand, and food availability. Retail food prices in the United States rose an average of over 9 percent annually from 1973 to 1979. The authors conclude that substantially reducing the upward movement in food prices is going to require the same long-term effort needed for doing so in the economy.

The Impact of Race on Consumer Food Purchases. Larry E. Salathe, Anthony E. Gallo, and William T. Boehm, National Economics Division. ESCS–68.

The population growth rate among racial groups has differed in the past and is expected to continue doing so. This report analyzes the impact of race on consumer food purchases.

Balance Sheet of the Farming Sector, 1979. Carson D. Evans, National Economics Division. AIB–430.

The Balance Sheet of the Farming Sector assembles the major farm asset inventory and liability accounts into one financial statement. Farm assets were valued at $820 billion on January 1, 1979, and outstanding debt was $137 billion, leaving farm proprietors an equity of $683 billion. Each of these amounts stood about 15 percent above value on January 1, 1978.

Small-Farm Issues: Proceedings of the ESCS Small-Farm Workshop, May 1978. Economic Development Division. ESCS–60.

Small farms are vital and a necessary way of life in the United States, according to participants of the May 1978 Small-Farm Workshop sponsored by the U.S. Department of Agriculture's Economics, Statistics, and Cooperatives Service. Workshop participants cited the need for a new focus on the farm family as a production, social, and income-earning unit. Small-farm families, in particular, need special attention.

Indicators of Social Well-Being for U.S. Counties. Peggy J. Ross, Herman Bluestone, and Fred K. Hines, Economic Development Division. RDRR–10.

Measures of economic performance have traditionally been used as indicators of well-being. However, social scientists and policymakers see the need for a much broader array of indicators to measure and monitor the many dimensions of social well-being. This study constructs four composite indexes or measures of social well-being: socio-economic, health, family status, and alienation.

Error Profile for Multiple-Frame Surveys. Norman D. Beller, Statistical Research Division. ESCS–63.

Multiple-frame surveys are susceptible to errors that stem from associating the overlapping portions of the frames. Decreasing sampling error may improve precision, but it offers greater complications; nonsampling error would increase, leading to decreased accuracy and, perhaps, greater total error. This manuscript offers several procedures to improve consistency and accuracy of multiple-frame estimating by reducing nonsampling errors.

U.S. Food Expenditures, 1954–78: New Measures at Point of Sale and by Type of Purchaser. Alden C. Manchester, and Richard A. King, National Economics Division. AER–431.

This report describes a newly developed series, called the total expenditures (TE) series. It is based on sales of food by different types of sellers—foodstores, restaurants, schools, and 25 other types of sellers or providers. The new series estimates sales of food and alcoholic beverages by retailers and others, primarily on the basis of current sales figures from the Monthly Retail Trade Report and Selected Services Receipts of the Bureau of the Census.

Economic Trends

[1]Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. [2]Beginning January 1978 for all urban consumers. [3]Revised to adapt to weighting structure and retail price indexes for domestically produced farm foods from the new Consumer Price Index for all urban consumers (CPI-U) published by the Bureau of Labor Statistics. [4]Annual and quarterly data are on a 50-State basis. [5]Annual rates seasonally adjusted, 2nd quarter. Gross and Net incomes include adjustment for change in inventories. [6]Seasonally adjusted. [7]As of March 1, 1967. [8]As of February 1.

Source: USDA (Agricultural Prices, Foreign Agricultural Trade, and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report, and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force, Wholesale Price Index, and Consumer Price Index).

Item	Unit or Base Period	1967	1978 Year	1978 July	1979 May	1979 June	1979 July
Prices:							
Prices received by farmers	1967=100	—	210	216	246	244	246
Crops	1967=100	—	204	213	220	233	243
Livestock and products	1967=100	—	217	218	269	255	250
Prices paid, interest, taxes, and wage rates	1967=100	—	219	220	248	249	251
Prices paid (living and production)	1967=100	—	212	213	239	240	243
Production items	1967=100	—	216	218	247	248	251
Ratio[1]	1967=100	—	96	98	99	98	98
Producer prices, all commodities	1967=100	—	209.3	210.6	231.6	233.1	236.6
Industrial commodities	1967=100	—	209.4	209.9	231.1	233.5	237.2
Farm products	1967=100	—	212.7	219.9	245.2	242.8	246.8
Processed foods and feeds	1967=100	—	202.6	204.5	222.1	220.7	223.0
Consumer price index, all items[2]	1967=100	—	195.4	196.7	214.1	216.6	218.9
Food[2]	1967=100	—	211.4	215.0	234.3	235.4	236.9
Farm Food Market Basket:[3]							
Retail cost	1967=100	—	199.4	204.5	244.2	224.9	225.9
Farm value	1967=100	—	207.4	215.6	235.9	231.1	229.9
Farm-retail spread	1967=100	—	194.5	197.7	217.0	221.0	223.4
Farmers' share of retail cost	Percent	—	39	40	40	39	38
Farm Income:[4]							
Volume of farm marketings	1967=100	—	123	105	98	117	N/A
Cash receipts from farm marketings	Million dollars	—	111,042	8,131	8,981	10,124	N/A
Crops	Million dollars	—	52,051	3,489	3,124	4,651	N/A
Livestock and products	Million dollars	—	58,991	4,642	5,857	5,473	N/A
Gross income[5]	Billion dollars	50.5	126.0	—	—	—	—
Farm production expenses[5]	Billion dollars	38.2	98.1	—	—	—	—
Net income[5]	Billion dollars	12.3	27.9	—	—	—	—
Agricultural Trade:							
Agricultural exports	Million dollars	—	—	2,133.8	2,509.1	2,760.6	2,715.2
Agricultural imports	Million dollars	—	—	1,186.4	1,375.5	1,507.0	1,279.5
Land Values:							
Average value per acre	Dollars	[7]168	[8]488	—	[8]559	—	—
Total value of farm real estate	Billion dollars	[7]189	[8]512	—	[8]584	—	—
Gross National Product:[5]	Billion dollars	796.3	2,127.6	—	—	2,329.4	—
Consumption	Billion dollars	490.4	1,350.9	—	—	1,475.2	—
Investment	Billion dollars	120.8	351.5	—	—	395.7	—
Government expenditures	Billion dollars	180.2	435.6	—	—	466.1	—
Net exports	Billion dollars	4.9	−10.3	—	—	−7.6	—
Income and Spending:[6]							
Personal income, annual rate	Billion dollars	626.6	1,717.4	1,730.0	1,892.1	1,905.5	1,932.7
Total retail sales, monthly rate	Billion dollars	24.4	66.6	66.6	74.8	74.5	71.5
Retail sales of food group, monthly rate	Billion dollars	5.8	14.5	15.0	16.3	17.0	16.4
Employment and Wages:[6]							
Total civilian employment	Millions	74.4	94.4	94.4	96.3	96.8	97.2
Agricultural	Millions	3.8	3.3	3.4	3.2	3.3	3.3
Rate of unemployment	Percent	3.8	6.0	6.1	5.8	5.6	5.7
Workweek in manufacturing	Hours	40.6	40.4	40.3	40.2	40.0	40.2
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	6.17	6.17	6.62	6.66	6.71
Industrial Production:[6]	1967=100	—	146.1	147.1	152.4	152.3	152.1
Manufacturers' Shipments and Inventories:[6]							
Total shipments, monthly rate	Million dollars	46,487	125,317	123,106	143,095	140,087	—
Total inventories, book value end of month	Million dollars	84,527	197,802	191,167	211,268	214,404	—
Total new orders, monthly rate	Million dollars	47,062	129,263	123,279	145,570	143,631	—

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